

MMWR

MORBIDITY AND MORTALITY WEEKLY REPORT

- 485 *Shigella dysenteriae* Type 1 in
Tourists to Cancun, Mexico
- 486 Influenza — United States, 1986–87
Season
- 475 Progress Toward the 1990 Objectives
for Improved Nutrition

Epidemiologic Notes and Reports

***Shigella dysenteriae* Type 1 in Tourists to Cancun, Mexico**

From January 1 to August 1, 1988, 17 cases of diarrheal disease caused by *Shigella dysenteriae* type 1 (Shiga bacillus) were reported to CDC. Three cases were reported to CDC during the same period in 1987. Fifteen of the patients with shigellosis had visited Cancun, Mexico, and two had visited other areas in Mexico in the weeks before or during onset of their illness. The patients had no common exposures in hotels or restaurants. Thirteen (76%) of the patients required hospitalization; two patients developed hemolytic-uremic syndrome. Six isolates tested thus far at CDC were resistant to chloramphenicol and tetracycline; two isolates were also resistant to ampicillin and trimethoprim-sulfamethoxazole. An epidemiologic and laboratory investigation is under way in Mexico.

Reported by: J Sepulveda Amor, Director General de Epidemiologia, Secretaria de Salud, Mexico. Enteric Diseases Br, Div of Bacterial Diseases, Center for Infectious Diseases, CDC.

Editorial Note: The antimicrobial agents often taken prophylactically and therapeutically by travelers—trimethoprim-sulfamethoxazole and tetracycline—may be ineffective against the *S. dysenteriae* type 1 strains for which sensitivity data are available. Physicians should consider this diagnosis in persons with severe or bloody diarrheal illness who have recently returned from Mexico, obtain appropriate cultures, and report suspected cases of *S. dysenteriae* to local and state public health authorities. Laboratories are requested to send isolates of *S. dysenteriae* to appropriate public health laboratories for serotyping. Travelers to Cancun and other regions with recognized risk for travelers' diarrhea should follow CDC's recommendations for international travel (1).

Reference

1. CDC. Health information for international travel, 1988. Atlanta: US Department of Health and Human Services, Public Health Service, 1988; HHS publication no. (CDC)88-8280.

Current Trends

Influenza – United States, 1986–87 Season

The 1986–87 influenza epidemic was caused by influenza A(H1N1) viruses resembling A/Taiwan/1/86(H1N1), a variant first isolated in China, Malaysia, Japan, and Singapore during January–April 1986 (1). The 1986–87 season was the third season during which influenza A(H1N1) strains predominated in the United States since this subtype reappeared in 1977 (2).

National data on influenza activity were obtained from four major sources:

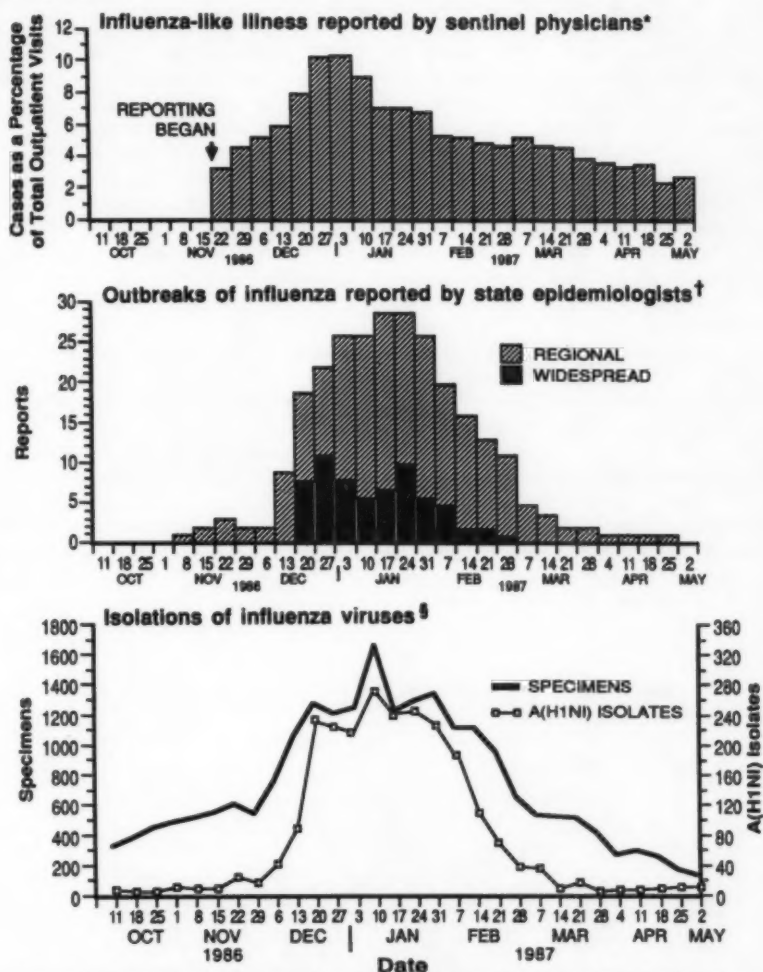
1. *State morbidity reports.* Each week, state and territorial epidemiologists estimated the extent of influenza-like activity indicated by surveillance systems in their state or territory by using the following categories: no cases, sporadically occurring cases, regional outbreaks (occurring in counties collectively constituting <50% of the state's population), or widespread outbreaks (occurring in counties collectively constituting ≥50% of the state's population).
2. *Sentinel physician surveillance network.* CDC received weekly reports from 138 physician members of the American Academy of Family Physicians who recorded the number of patient visits for influenza-like illnesses. Reports were based on a clinical case definition, but some physicians submitted specimens to a central laboratory for diagnosis by rapid culture confirmation of influenza virus (3).
3. *Mortality in 121 cities.* Death certificate data listing pneumonia or influenza (P&I) as a cause of death were reported from 121 cities weekly and analyzed to determine if the percentage of deaths attributed to P&I was higher than would be expected in the absence of an influenza epidemic. This index has historically reflected seasonal influenza-attributable mortality (4).
4. *World Health Organization (WHO) collaborating laboratories.* Sixty-four WHO collaborating laboratories provided weekly reports of the number of respiratory specimens submitted for virus isolation and the number and types of influenza isolates identified. The WHO collaborating laboratories included state public health laboratories in 47 states and the District of Columbia as well as several county, city, and university laboratories.

In addition to the methods described above, CDC received reports from military laboratories and Veterans Administration hospitals and reports of outbreaks and unusual influenza cases from a variety of sources.

Most of the outbreaks reported to CDC during the 1986–87 season occurred among children and young adults. Only one nursing home outbreak was reported, suggesting that outbreaks among the elderly were uncommon (5). This observation is consistent with other recent A(H1N1) epidemics. However, this was the first A(H1N1) epidemic since this subtype reappeared that was associated with excess P&I deaths reported through the 121 cities.

Sporadic cases of influenza A(H1N1) occurred in Hawaii in June and August 1986 but were not identified in the contiguous United States until late September (6). The first reported U.S. outbreak occurred in October at a military facility in Florida (7). Communitywide activity also involved other regions of the United States in late 1986. Sentinel physicians reported a peak in outpatient visits for influenza-like illness (Figure 1) from mid-December 1986 through January 1987. State epidemiologists in 42 states and the District of Columbia reported regional or widespread outbreaks,

Influenza — Continued

FIGURE 1. Indicators of influenza activity, by week — United States, October 1986–May 1987

*Reported to CDC by 138 physician members of the American Academy of Family Physicians. A patient with a temperature ≥ 38.7 C (100 F) and at least cough or sore throat was considered to have influenza-like illness.

†Reported to CDC by state and territorial epidemiologists who used the following categories: no cases, sporadically occurring cases, regional outbreaks (occurring in counties collectively constituting $<50\%$ of the state's population), or widespread outbreaks (occurring in counties collectively constituting $\geq 50\%$ of the state's population).

‡Reported to CDC by 64 WHO collaborating laboratories (not including military laboratories).

Influenza — Continued

primarily in the northeast, west north central, mountain, and Pacific regions (Figure 2). Influenza activity reported by state epidemiologists also increased during December and peaked during January (Figure 1).

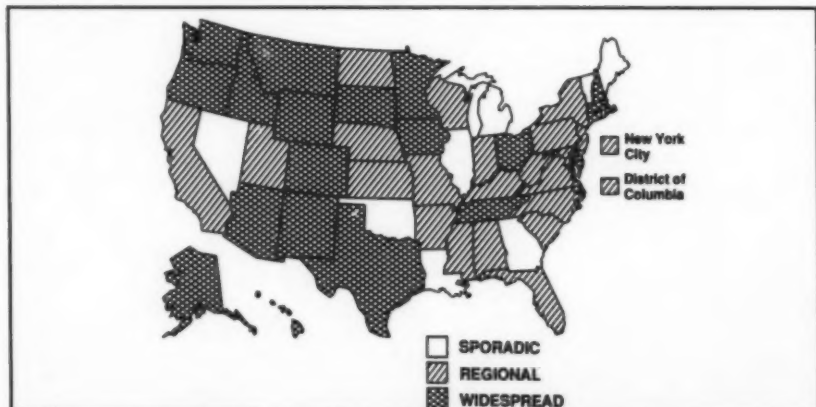
P&I deaths slightly exceeded the epidemic threshold for 4 weeks from mid-January to mid-February and again during the first 2 weeks of March 1987 (Figure 3). Approximately 80% of these deaths occurred in persons 65 years of age or older.

Influenza A(H1N1) strains were reported from all 50 states and the District of Columbia. WHO collaborating laboratories in the United States reported 2222 influenza virus isolates. Influenza A(H1N1) viruses accounted for 2206 (99.3%) of the isolates. Sentinel physicians reported an additional 33 A(H1N1) isolates. Ninety-five percent of virus isolates from WHO collaborating laboratories were reported during a 13-week period between November 30, 1986, and February 28, 1987 (Figure 1). Reports of virus isolation were most frequent from mid-December through January. Influenza type A(H3N2) and type B strains were rarely isolated.

Age group of patients was available for 1918 A(H1N1) isolates reported by WHO collaborating laboratories. Of these isolates, 1874 (97.7%) were obtained from persons under 65 years of age (Table 1). More detailed information regarding ages of patients with laboratory diagnosis is available for 261 of the specimens submitted to the WHO Collaborating Center for Influenza (WHOCCI). Of these, 235 (90%) were obtained from persons less than 36 years of age.

WHOCCI did antigenic analysis on 315 influenza A(H1N1) isolates collected in 42 states. Most were closely related to the reference strain A/Taiwan/1/86(H1N1). Of the nine influenza A(H3N2) isolates submitted to WHOCCI for antigenic analysis, four resembled A/Leningrad/360/86(H3N2), a newly recognized minor variant; the remaining five resembled previously identified strains. Four influenza B isolates were submitted for antigenic analysis; one resembled B/Ann Arbor/1/86, and the other was a related variant.

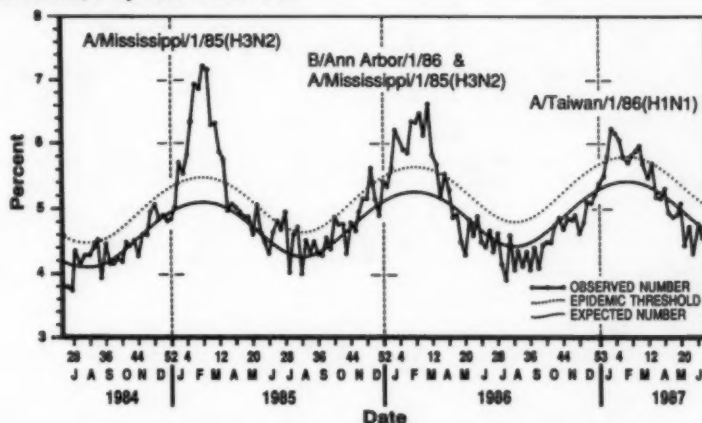
FIGURE 2. Maximum level of influenza outbreak activity reported by state — United States, September 26, 1986–May 2, 1987



Influenza - Continued

In contrast to most years, two influenza vaccines were manufactured for use during the 1986-87 season. The new A/Taiwan/1/86-like variants were detected relatively early, and viruses were submitted promptly from national influenza centers in Asia to the WHOCCIs in Atlanta and London; thus, July 1986 data supported the need to manufacture a monovalent A/Taiwan/1/86 vaccine (8). This vaccine was specifically recommended for high-risk persons less than 35 years of age to supplement the standard trivalent influenza vaccine (9). Approximately seven million doses of the monovalent vaccine were manufactured and distributed before the epidemic peaked in early 1987.

FIGURE 3. Pneumonia and influenza (P&I) deaths as a percentage of total deaths* - United States, July 1984-June 1987



*Reported to CDC from 121 U.S. cities. P&I deaths include all deaths for which pneumonia is listed as a primary or underlying cause or for which influenza is listed on the death certificate. The predominant virus strain is shown above the peak of mortality for each epidemic season. The epidemic threshold for the 1986-87 influenza season was estimated at 1.645 standard deviations above the values projected on the basis of a periodic regression model applied to observed P&I deaths for the previous 5-year period but excluding the observations during influenza outbreaks.

TABLE 1. Specimens tested and influenza type A(H1N1) viruses isolated by age group as reported to CDC by WHO collaborating laboratories - United States, October 1986-May 1987

Age group* (yrs)	Specimens tested		Type A(H1N1)		Percent specimens positive
	No.	(%)	No.	(%)	
<20	10,495	(59.4)	941	(49.1)	9.0
20-64	6,178	(35.0)	933	(48.6)	15.1
>64	983	(5.6)	44	(2.3)	4.5
Total	17,656	(100.0)	1,918	(100.0)	10.9

*Age group was not specified for 4,408 (20.0%) specimens tested. Influenza isolates were recovered from 291 (6.6%) of these specimens; 288 (99.0%) of the isolates were influenza A (H1N1).

Influenza - Continued

Reported by: Participating State and Territorial Epidemiologists and State Laboratory Directors. Sentinel Physicians of the American Academy of Family Physicians. WHO Collaborating Laboratories. Participating Veterans Administration Hospitals. Letterman Army Medical Center, San Francisco, California. Hackensack Hospital, Hackensack, New Jersey. Strong Memorial Hospital, Rochester, New York. Vanderbilt Univ, Nashville, Tennessee. Influenza Research Center, Baylor College of Medicine, Houston; 5th Army Medical Laboratory, Fort Sam Houston; USAF School of Aerospace Medicine, Epidemiology Div, Brooks AFB, Texas. Statistical Svcs Br, Div of Surveillance and Epidemiologic Studies, Epidemiology Program Office; Div of Immunization, Center for Prevention Svcs; WHO Collaborating Center for Influenza, Influenza Br, Div of Viral Diseases, Center for Infectious Diseases, CDC.

Editorial Note: The 1986-87 influenza season illustrated the ability of a new strain of influenza to rapidly spread after appearing in Asia. In January 1986, influenza A(H1N1) variants related to A/Taiwan/1/86 first appeared in Northern China. During April and May, unusually high levels of epidemic activity were reported from Malaysia and Singapore. At the same time, similar viruses were isolated in Japan and Taiwan, where the 1985-86 winter epidemic was ending. Outbreaks were reported in some Pacific Island nations during June and July. In the United States, activity peaked rapidly during December and January and declined in February.

(Continued on page 475)

TABLE I. Summary - cases of specified notifiable diseases, United States

Disease	31st Week Ending			Cumulative, 31st Week Ending		
	Aug. 6, 1988	Aug. 8, 1987	Median 1983-1987	Aug. 6, 1988	Aug. 8, 1987	Median 1983-1987
Acquired Immunodeficiency Syndrome (AIDS)	853	U *	187	18,824	11,328	4,486
Asplenic meningitis	108	424	359	2,747	4,678	4,006
Encephalitis: Primary (arthropod-borne & unspc)	17	29	29	414	598	590
Post-infectious	1	1	1	69	72	72
Gonorrhea: Civilian	13,150	14,845	17,992	401,796	464,683	512,677
Military	181	230	403	7,196	9,754	12,500
Hepatitis: Type A	470	474	471	14,307	14,730	12,836
Type B	391	461	619	12,528	15,333	14,990
Non A, Non B	54	54	75	1,512	1,903	2,182
Unspecified	32	43	116	1,242	1,861	2,608
Legionellosis	14	21	15	492	555	420
Leprosy	3	7	6	99	119	152
Malaria	22	20	22	469	491	514
Measles: Total [†]	153	92	47	1,952	3,132	2,181
Indigenous	141	74	44	1,750	2,764	1,904
Imported	12	18	9	202	368	254
Meningococcal infections	31	37	37	1,926	1,949	1,858
Mumps	62	63	35	3,243	9,902	2,310
Pertussis	45	97	94	1,277	1,195	1,257
Rubella (German measles)	2	1	7	135	265	453
Syphilis (Primary & Secondary): Civilian	780	587	583	22,665	20,294	16,439
Military	3	8	6	103	100	113
Toxic Shock syndrome	7	7	7	188	187	234
Tuberculosis	363	454	445	11,894	12,427	12,513
Tularemia	6	8	8	107	117	117
Typhoid Fever	4	2	8	197	177	189
Typhus fever, tick-borne (RMSF)	30	20	28	366	365	413
Rabies, animal	88	82	105	2,514	2,948	3,144

TABLE II. Notifiable diseases of low frequency, United States

	Cum. 1988		Cum. 1988
Anthrax	-	Leptospirosis (Hawaii 1)	19
Botulism: Foodborne	18	Plague (Calif. 1; Colo. 1)	6
Infant (Utah 1)	22	Poliomyelitis, Paralytic	-
Other	3	Psittacosis (Colo. 1)	50
Brucellosis	37	Rabies, human	-
Cholera	-	Tetanus (Minn. 1)	27
Congenital rubella syndrome	3	Trichinosis	38
Congenital syphilis, ages < 1 year	171		
Diphtheria	-		

*Because AIDS cases are not received weekly from all reporting areas, comparison of weekly figures may be misleading.

[†]One of the 153 reported cases for this week was imported from a foreign country or can be directly traceable to a known internationally imported case within two generations.

TABLE III. Cases of specified notifiable diseases, United States, weeks ending August 6, 1988 and August 8, 1987 (31st Week)

Reporting Area	AIDS	Acute Meningitis	Encephalitis		Gonorrhea (Civilian)		Hepatitis (Viral), by type				Legionel- losis	Laprosy
			Primary	Post-in- fectious	Cum. 1988	Cum. 1987	A	B	NA/NB	Unspeci- fied		
	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	18,824	2,747	414	69	401,798	464,683	14,307	12,928	1,512	1,242	492	99
NEW ENGLAND	786	131	17	2	12,283	14,307	530	754	93	67	21	13
Maine	23	8	1	-	238	418	14	32	3	1	2	-
N.H.	19	18	1	1	158	238	33	43	7	3	2	-
Vt.	9	9	8	-	95	125	8	21	5	2	1	-
Mass.	387	51	7	1	4,320	5,174	254	466	62	48	13	12
R.I.	48	30	-	-	1,052	1,199	58	63	9	-	3	1
Conn.	269	18	3	-	6,430	7,153	183	129	7	13	-	-
MID. ATLANTIC	6,319	245	38	4	60,238	76,108	897	1,716	93	140	120	8
Upstate N.Y.	811	141	28	1	8,398	10,315	467	450	41	14	52	-
N.Y. City	3,426	87	7	3	25,403	40,165	175	758	10	98	19	7
N.J.	1,550	47	5	-	8,886	9,636	145	376	32	26	20	1
Pa.	530	-	-	-	17,551	15,982	110	123	10	2	29	-
E.N. CENTRAL	1,404	369	101	9	64,793	66,420	928	1,381	127	68	105	1
Ohio	305	122	28	2	15,055	15,239	208	336	22	10	44	-
Ind.	80	38	12	-	5,134	5,524	78	185	11	19	8	-
Ill.	672	62	24	7	19,036	20,896	270	271	48	16	-	-
Mich.	280	125	26	-	20,729	20,560	226	431	29	20	42	-
Wis.	67	21	11	-	4,829	6,211	148	158	19	3	11	1
W.N. CENTRAL	428	120	25	5	16,430	18,628	940	617	70	23	53	1
Minn.	88	23	2	2	2,282	2,908	68	84	14	3	2	-
Iowa	23	19	8	-	1,255	1,839	34	60	11	1	13	-
Mo.	223	42	1	-	9,335	9,823	481	364	31	12	11	-
N. Dak.	3	-	4	-	95	178	4	6	2	4	1	-
S. Dak.	5	10	1	1	321	346	6	3	2	-	14	-
Nebr.	25	5	4	2	856	1,159	42	33	1	-	5	-
Kans.	61	21	5	-	2,186	2,374	205	67	9	3	7	1
S. ATLANTIC	3,190	654	61	26	117,935	121,737	1,265	2,681	228	177	99	1
Del.	36	13	2	-	1,730	1,937	24	79	6	1	7	-
Md.	358	72	5	3	11,583	13,531	176	409	21	12	13	1
D.C.	314	13	1	1	8,352	8,113	11	28	3	1	-	-
Va.	225	69	22	3	8,075	8,819	260	202	51	112	6	-
W. Va.	10	11	6	-	836	921	9	35	2	3	-	-
N.C.	173	84	16	-	18,414	18,479	199	480	54	-	26	-
S.C.	106	11	-	1	10,027	10,047	30	327	8	5	13	-
Ga.	455	76	1	-	22,170	21,226	248	390	6	3	12	-
Fla.	1,514	305	8	18	36,748	38,664	308	731	73	40	12	-
E.S. CENTRAL	458	196	31	6	31,555	35,017	418	781	109	7	22	1
Ky.	57	57	10	1	3,059	3,517	347	139	38	2	9	-
Tenn.	210	16	6	-	10,680	12,117	45	389	27	-	6	-
Ala.	121	88	15	2	9,954	11,395	10	201	36	5	4	1
Miss.	70	25	-	3	7,852	7,988	16	52	8	-	3	-
W.S. CENTRAL	1,891	342	47	2	44,847	52,231	1,634	1,072	114	309	14	19
Ark.	54	5	2	-	4,396	5,797	188	62	1	10	3	-
La.	204	52	14	-	9,053	9,399	82	199	17	10	4	1
Okla.	83	31	4	-	4,103	5,752	304	112	28	20	7	-
Tex.	1,550	254	27	2	27,293	31,283	1,060	699	68	269	-	18
MOUNTAIN	546	107	21	2	8,867	12,225	2,014	1,007	162	110	29	1
Mont.	9	2	-	-	282	333	25	34	9	3	-	-
Idaho	7	1	-	-	226	433	101	70	5	3	-	-
Wyo.	3	1	-	-	130	276	4	10	3	-	2	-
Colo.	202	41	3	-	2,012	2,682	139	124	45	55	7	1
N. Mex.	26	6	2	-	822	1,329	376	148	12	1	1	-
Ariz.	169	34	7	1	3,187	4,232	1,015	390	48	30	12	-
Utah	45	13	4	1	344	383	217	88	28	14	3	-
Nev.	85	9	5	-	1,864	2,557	137	143	12	4	3	-
PACIFIC	4,123	583	73	13	44,850	66,010	5,781	2,919	518	341	40	54
Wash.	246	-	5	4	3,779	6,094	1,254	474	111	37	13	3
Oreg.	129	-	-	-	1,898	2,474	857	359	50	14	-	1
Calif.	3,668	516	66	9	38,183	56,921	3,369	2,019	348	281	24	42
Alaska	14	13	2	-	615	987	244	36	5	5	-	1
Hawaii	68	54	1	-	375	534	7	31	4	4	3	7
Guam	1	-	-	-	86	135	5	7	-	2	1	3
P.R.	789	23	2	1	789	1,260	27	153	26	27	-	3
V.I.	25	-	-	-	218	153	1	5	2	-	-	-
Amer. Samoa	-	-	-	-	45	45	-	2	-	4	-	2
C.N.M.I.	-	-	-	-	27	-	1	2	-	4	-	-

N: Not notifiable

U: Unavailable

C.N.M.I.: Commonwealth of the Northern Mariana Islands

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 6, 1988 and August 8, 1987 (31st Week)

Reporting Area	Malaria		Measles (Rubeola)				Meningeococcal Infections		Mumps		Pertussis			Rubella		
			Indigenous		Imported*		Total									
	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	Cum. 1987	Cum. 1988	1988	Cum. 1988	1988	Cum. 1988	1988	Cum. 1987	1988	Cum. 1988	Cum. 1987
UNITED STATES	468	141	1,750	12	202	3,132	1,926	62	3,243	45	1,277	1,195	2	136	266	
NEW ENGLAND	38	-	80	-	50	250	163	-	102	2	107	58	-	2	1	
Maine	2	-	7	-	-	3	7	-	-	-	11	6	-	-	1	
N.H.	1	-	66	-	44	151	17	-	94	-	33	12	-	-	-	
Vt.	2	-	-	-	-	20	10	-	2	-	2	4	-	-	-	
Mass.	20	-	1	-	2	48	75	-	6	2	45	23	-	1	-	
R.I.	5	-	-	-	-	2	21	-	-	-	4	1	-	1	-	
Conn.	8	-	6	-	4	20	33	-	-	-	12	12	-	-	-	
MID. ATLANTIC	66	101	721	11	39	545	184	-	267	6	71	141	-	12	11	
Upstate N.Y.	22	-	15	115	16	38	90	-	72	2	41	104	-	2	9	
N.Y. City	33	-	38	-	2	434	48	-	92	-	1	-	-	7	1	
N.J.	5	100	177	-	11	36	45	-	31	-	4	7	-	1	1	
Pa.	8	1	490	-	10	38	1	-	72	4	25	30	-	2	-	
E.N. CENTRAL	28	2	131	-	44	295	260	1	658	1	118	145	-	23	31	
Ohio	4	-	2	-	21	5	87	-	97	-	25	39	-	-	-	
Ind.	2	-	56	-	-	-	21	1	64	-	55	6	-	-	-	
Ill.	1	2	55	-	15	124	55	-	239	-	2	13	-	19	22	
Mich.	19	-	18	-	5	29	60	-	173	1	24	30	-	4	9	
Wis.	2	-	-	-	3	137	37	-	85	-	12	57	-	-	-	
W.N. CENTRAL	13	-	11	1	1	223	73	-	116	10	82	70	-	-	1	
Minn.	5	-	10	11	1	38	16	-	-	8	37	10	-	-	-	
Iowa	1	-	-	-	-	-	-	-	31	-	19	16	-	-	1	
Mo.	3	-	1	-	-	183	25	-	30	1	11	23	-	-	-	
N. Dak.	-	-	-	-	-	1	-	-	-	-	7	5	-	-	-	
S. Dak.	-	-	-	-	-	-	3	-	1	1	4	3	-	-	-	
Nebr.	1	-	-	-	-	-	10	-	11	-	-	1	-	-	-	
Kans.	3	-	-	-	-	1	19	-	43	-	4	12	-	-	-	
S. ATLANTIC	66	19	283	-	12	126	339	34	524	2	146	208	-	16	13	
Del.	8	-	-	-	-	32	2	-	-	-	4	5	-	-	2	
Md.	9	-	9	-	2	5	37	9	95	-	26	6	-	1	2	
D.C.	9	-	-	-	-	1	7	26	200	-	27	42	-	-	-	
Va.	10	-	141	-	2	1	38	-	132	-	22	47	-	11	1	
W. Va.	-	-	6	-	-	-	4	-	8	-	4	33	-	-	-	
N.C.	11	-	-	-	1	4	59	-	38	-	37	83	-	-	1	
S.C.	7	-	-	-	-	2	33	-	4	-	1	-	-	-	-	
Ga.	4	-	-	-	-	1	47	-	25	1	21	21	-	1	1	
Fla.	16	19	107	-	7	80	112	-	22	1	26	18	-	3	6	
E.S. CENTRAL	7	3	51	-	-	2	179	5	381	2	34	24	-	-	3	
Ky.	-	-	36	-	-	-	39	-	174	-	6	1	-	-	2	
Tenn.	-	-	-	-	-	-	104	5	194	2	15	6	-	-	1	
Ala.	4	-	-	-	-	-	25	-	10	-	12	12	-	-	-	
Miss.	3	3	16	-	-	2	11	N	N	-	1	5	-	-	-	
W.S. CENTRAL	48	-	11	-	3	398	126	13	633	2	74	107	-	7	10	
Ark.	1	-	-	-	1	-	17	-	79	1	8	8	-	3	2	
La.	6	-	-	-	-	-	37	8	242	-	11	26	-	-	-	
Okla.	7	-	8	-	-	3	13	5	173	1	28	73	-	1	5	
Tex.	32	-	3	-	2	395	59	-	139	-	27	-	-	3	3	
MOUNTAIN	22	-	118	-	18	491	57	-	140	13	393	113	-	5	22	
Mont.	4	-	-	-	16	129	2	-	2	-	1	6	-	-	6	
Idaho	-	-	-	-	1	-	7	-	2	2	281	33	-	-	1	
Wyo.	-	-	-	-	-	2	-	-	2	-	1	5	-	-	1	
Colo.	9	-	118	-	1	9	14	-	28	-	14	37	-	1	-	
N. Mex.	1	-	-	-	-	317	10	N	N	1	12	8	-	-	-	
Ariz.	5	-	-	-	-	31	14	-	101	10	93	23	-	-	4	
Utah	2	-	-	-	-	1	9	-	3	-	20	1	-	3	10	
Nev.	1	-	-	-	-	3	1	-	11	-	1	-	-	-	-	
PACIFIC	181	16	366	-	36	802	545	9	413	7	252	329	2	70	173	
Wash.	12	-	2	-	-	38	48	-	38	3	54	52	-	-	1	
Oreg.	11	-	3	-	-	74	30	N	N	-	15	42	-	-	2	
Calif.	152	16	359	-	29	686	446	8	345	4	133	118	2	52	108	
Alaska	2	-	-	-	-	-	6	1	8	-	5	5	-	-	2	
Hawaii	4	-	2	-	6	4	15	-	11	-	45	112	-	18	50	
Guam	-	-	-	-	1	2	-	-	2	-	-	-	-	1	1	
P.R.	1	-	191	-	-	705	8	-	6	-	9	14	-	-	1	
V.I.	-	-	-	-	-	-	-	-	14	-	-	-	-	-	-	
Amer. Samoa	-	-	-	-	-	-	2	-	3	-	-	-	-	-	-	
C.N.M.I.	1	-	-	-	-	-	1	-	1	-	-	-	-	-	-	

*For measles only, imported cases includes both out-of-state and international importations.

N: Not notifiable U: Unavailable I: International O: Out-of-state

TABLE III. (Cont'd.) Cases of specified notifiable diseases, United States, weeks ending August 6, 1988 and August 8, 1987 (31st Week)

Reporting Area	Syphilis (Civilian) (Primary & Secondary)		Toxic- shock Syndrome	Tuberculosis		Tula- remia	Typhoid Fever	Typhus Fever (Tick-borne) (RMSF)	Rabies, Animal
	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1987	Cum. 1988	Cum. 1988	Cum. 1988	Cum. 1988
UNITED STATES	22,885	20,294	188	11,884	12,427	107	197	388	2,514
NEW ENGLAND	640	328	18	301	384	2	16	8	10
Maine	9	1	3	17	17	-	-	-	1
N.H.	6	3	3	6	12	-	-	-	3
Vt.	2	1	2	2	9	-	1	-	-
Mass.	255	158	8	177	219	1	11	4	-
R.I.	19	8	-	26	30	-	-	2	-
Conn.	349	157	-	73	107	1	4	2	6
MID. ATLANTIC	4,555	3,874	28	2,164	2,109	-	37	15	320
Upstate N.Y.	304	140	13	317	314	-	5	8	17
N.Y. City	2,911	2,800	5	1,067	987	-	21	5	-
N.J.	538	414	3	375	378	-	11	-	8
Pa.	802	520	7	405	422	-	-	2	295
E.N. CENTRAL	670	545	30	1,333	1,445	1	23	27	85
Ohio	65	67	21	258	272	-	5	22	3
Ind.	36	36	-	140	143	-	2	-	17
Ill.	321	294	1	547	625	-	11	2	16
Mich.	230	107	8	326	341	1	4	2	22
Wis.	18	41	-	62	64	-	1	1	27
W.N. CENTRAL	140	91	21	309	379	53	4	54	309
Minn.	14	12	3	50	78	3	2	2	82
Iowa	16	14	4	28	24	-	-	-	13
Mo.	82	46	7	159	206	33	2	31	12
N. Dak.	1	-	2	5	6	-	-	-	63
S. Dak.	-	8	1	22	21	13	-	7	95
Nebr.	21	7	2	9	15	2	-	1	10
Kans.	6	4	2	36	29	2	-	13	24
S. ATLANTIC	8,347	6,997	15	2,592	2,700	4	22	120	816
Del.	88	47	1	22	30	1	-	-	35
Md.	463	357	2	268	242	-	1	19	205
D.C.	404	209	-	116	64	-	-	-	4
Va.	251	178	-	238	270	2	8	12	228
W. Va.	7	6	-	50	71	-	-	2	64
N.C.	476	390	7	233	296	-	1	59	4
S.C.	463	468	2	287	285	-	-	14	53
Ga.	1,359	956	-	416	467	1	2	9	164
Fla.	4,956	4,386	3	963	995	-	9	5	59
E.S. CENTRAL	1,159	1,103	14	979	1,090	7	3	47	184
Ky.	40	10	7	238	260	4	1	15	71
Tenn.	501	448	4	267	317	2	-	23	55
Ala.	340	281	3	301	325	-	1	5	56
Miss.	278	364	-	173	188	1	1	4	2
W.S. CENTRAL	2,548	2,517	17	1,540	1,427	28	7	83	340
Ark.	140	163	1	163	168	18	-	14	57
La.	496	425	-	190	144	-	3	1	3
Okla.	90	92	6	150	145	10	-	59	24
Tex.	1,822	1,837	10	1,037	970	-	4	9	256
MOUNTAIN	453	420	23	303	385	8	8	10	218
Mont.	3	8	-	6	9	-	1	6	140
Idaho	2	4	3	11	21	-	-	1	3
Wyo.	1	1	-	2	2	1	-	3	28
Colo.	72	73	3	27	81	5	3	-	11
N. Mex.	35	36	-	62	64	1	1	-	6
Ariz.	108	202	8	149	145	-	1	-	28
Utah	11	16	9	18	18	1	-	-	4
Nev.	221	81	-	29	17	-	-	-	-
PACIFIC	4,153	4,419	24	2,373	2,518	4	79	2	232
Wash.	98	77	3	124	153	-	6	-	-
Oreg.	178	181	1	87	62	-	-	1	-
Calif.	3,848	4,169	20	2,042	2,150	2	66	1	224
Alaska	8	3	-	25	32	2	-	-	8
Hawaii	21	9	-	95	121	-	3	-	-
Guam	3	2	-	8	25	-	-	-	-
P.R.	359	577	-	113	183	-	4	-	40
V.I.	1	4	-	2	4	-	-	-	-
Amer. Samoa	-	-	-	3	3	-	1	-	-
C.N.M.I.	1	-	-	12	-	-	-	-	-

U: Unavailable

TABLE IV. Deaths in 121 U.S. cities,* week ending
August 6, 1988 (31st Week)

Reporting Area	All Causes, By Age (Years)						P&I**	Total	Reporting Area	All Causes, By Age (Years)						P&I**	Total
	All Ages	>85	45-64	25-44	1-24	<1				All Ages	>85	45-64	25-44	1-24	<1		
NEW ENGLAND	613	408	115	51	22	17	31		S. ATLANTIC	1,391	832	317	148	45	48	49	
Boston, Mass.	186	100	33	18	10	6	12		Atlanta, Ga.	151	85	40	23	3	-	-	
Bridgeport, Conn.	40	30	5	2	1	2			Baltimore, Md.	396	220	85	40	8	13	20	
Cambridge, Mass.†	19	15	3	1	-	-	2		Charlotte, N.C.	74	46	16	7	2	3	3	
Fall River, Mass.	35	26	6	1	-	-			Jacksonville, Fla.	116	79	24	7	5	1	6	
Hartford, Conn.	54	32	9	11	1	1	2		Miami, Fla.	108	55	29	16	5	3	-	
Lowell, Mass.	38	20	10	3	4	1	3		Norfolk, Va.	64	36	14	6	1	7	3	
Lynn, Mass.	14	10	4	-	-	-			Richmond, Va.	72	39	17	8	3	5	5	
New Bedford, Mass.	31	21	4	6	-	-			Savannah, Ga.	52	29	17	3	3	-	-	
New Haven, Conn.	38	23	5	4	1	5			St. Petersburg, Fla.	81	62	8	3	4	4	1	
Providence, R.I.	35	25	8	1	1	-			Tampa, Fla.	82	40	11	4	2	4	5	
Somerville, Mass.	6	3	1	1	-	1			Washington, D.C.	224	129	50	29	9	7	6	
Springfield, Mass.	50	36	10	3	1	-	4		Wilmington, Del.	21	12	6	2	-	1	-	
Worcester, Conn.	32	25	6	-	1	-	2		E.S. CENTRAL	773	486	163	68	32	21	31	
Worcester, Mass.	56	42	9	2	2	1	2		Birmingham, Ala.	125	79	21	12	9	4	3	
MID. ATLANTIC	2,481	1,584	497	266	85	47	111		Chattanooga, Tenn.	73	51	12	6	4	-	1	
Albany, N.Y.	52	36	10	4	-	2			Knockville, Tenn.	96	43	14	4	2	3	5	
Allentown, Pa.	12	9	3	-	-	-			Louisville, Ky.	75	43	19	4	3	3	3	
Buffalo, N.Y.	94	55	23	10	3	3	8		Memphis, Tenn.	206	135	40	22	6	2	8	
Camden, N.J.	40	24	9	4	3	-			Mobile, Ala.	77	45	24	2	4	2	6	
Elizabeth, N.J.	13	8	1	3	-	-	3		Montgomery, Ala.	39	24	8	3	2	2	2	
Erie, Pa.†	22	16	5	1	-	-			Nashville, Tenn.	112	68	25	15	2	2	3	
Jersey City, N.J.	57	34	15	6	-	2	2		W.S. CENTRAL	1,494	895	330	171	52	46	62	
N.Y. City, N.Y.	1,358	860	258	160	52	28	48		Austin, Tex.	37	27	6	4	-	-	1	
Newark, N.J.	45	19	10	11	4	1	4		Baton Rouge, La.	43	27	8	6	2	-	3	
Peterborough, N.J.	26	21	2	1	1	-			Corpus Christi, Tex.	38	27	9	2	-	-	3	
Philadelphia, Pa.	397	241	94	39	18	4	13		Dallas, Tex.	188	94	43	29	13	9	6	
Pittsburgh, Pa.†	20	13	6	-	-	1			El Paso, Tex.	59	37	13	4	2	3	4	
Reading, Pa.	33	26	5	-	-	2	6		Fort Worth, Tex.	83	54	18	6	1	4	4	
Rochester, N.Y.	118	82	20	12	2	2	14		Houston, Tex.†	576	335	135	70	21	15	15	
Schenectady, N.Y.	19	14	5	-	-	-			Little Rock, Ark.	44	33	8	-	-	3	5	
Scranton, Pa.†	34	27	6	1	-	-	1		New Orleans, La.	85	50	18	17	-	-	-	
Syracuse, N.Y.	63	43	10	8	1	1	3		San Antonio, Tex.	162	100	33	17	8	4	9	
Trenton, N.J.	36	26	8	2	-	-	2		Shreveport, La.	78	50	15	6	3	4	7	
Utica, N.Y.	19	16	2	-	1	-			Tulsa, Okla.	101	61	24	10	2	4	5	
Yonkers, N.Y.	23	14	5	4	-	-	5		MOUNTAIN	817	406	117	43	33	18	20	
E.N. CENTRAL	2,197	1,391	465	173	89	79	72		Albuquerque, N. Mex.	86	53	15	11	4	3	2	
Akron, Ohio	55	35	9	5	3	3			Colo. Springs, Colo.	33	25	6	-	1	1	7	
Canton, Ohio	40	31	6	2	-	1	4		Denver, Colo.	108	73	18	6	7	4	2	
Chicago, Ill.†	564	362	125	45	10	22	16		Las Vegas, Nev.	85	54	21	4	3	3	1	
Cincinnati, Ohio	143	105	25	8	4	1	10		Ogden, Utah	26	16	5	-	4	1	-	
Cleveland, Ohio	144	89	25	15	9	6	1		Phoenix, Ariz.	127	81	29	8	6	3	-	
Columbus, Ohio	125	70	35	13	3	4	1		Pueblo, Colo.	21	16	2	2	-	1	-	
Dayton, Ohio	103	66	25	9	3	-	4		Salt Lake City, Utah	44	26	6	6	4	2	4	
Detroit, Mich.	235	125	53	29	12	16	3		Tucson, Ariz.	87	62	15	6	4	-	4	
Evansville, Ind.	35	17	11	2	3	2	-		PACIFIC	1,874	1,173	368	189	70	68	103	
Fort Wayne, Ind.	61	38	15	6	2	-			Berkeley, Calif.	16	9	3	1	2	1	1	
Gary, Ind.	13	3	7	1	2	-	1		Fresno, Calif.	78	56	13	5	4	-	5	
Grand Rapids, Mich.	83	40	9	1	2	-	4		Glendale, Calif.	30	22	4	2	2	-	1	
Indianapolis, Ind.	162	100	33	12	5	2	4		Honolulu, Hawaii	70	43	15	5	2	5	9	
Madison, Wis.	37	20	6	5	4	2	-		Long Beach, Calif.	87	57	17	7	-	6	7	
Milwaukee, Wis.	133	96	23	4	6	4	8		Los Angeles, Calif.	494	308	95	55	22	10	16	
Peoria, Ill.	49	30	12	1	2	4	3		Oakland, Calif.	55	28	11	11	4	-	3	
Rockford, Ill.	45	27	9	4	4	1	4		Pasadena, Calif.	27	18	4	2	1	2	-	
South Bend, Ind.	29	19	7	1	1	1	4		Portland, Oreg.	121	89	22	5	1	4	7	
Toledo, Ohio	107	76	17	6	4	4	6		Sacramento, Calif.	147	89	25	19	7	6	20	
Youngstown, Ohio	64	42	13	4	3	2	3		San Diego, Calif.	190	114	35	21	11	9	10	
W.N. CENTRAL	792	565	138	49	22	20	38		San Francisco, Calif.	153	88	34	23	2	6	3	
Des Moines, Iowa	50	32	10	4	4	-	2		San Jose, Calif.	148	93	35	11	3	6	7	
Duluth, Minn.	20	15	1	3	-	1	1		Seattle, Wash.	175	101	40	15	7	12	1	
Kansas City, Kans.	39	26	8	4	1	-	4		Spokane, Wash.	44	31	9	3	2	-	1	
Kansas City, Mo.	131	67	25	9	5	5	1		Tacoma, Wash.	39	27	7	4	-	1	6	
Lincoln, Nebr.	35	28	9	3	-	1	1		TOTAL	12,232††	7,742	2,508	1,158	450	364	517	
Minneapolis, Minn.	235	180	34	13	3	5	16										
Omaha, Nebr.	61	47	6	4	3	1	2										
St. Louis, Mo.	119	74	29	7	4	5	7										
St. Paul, Minn.	50	41	6	1	1	1	1										
Wichita, Kans.†	72	55	14	1	1	1	3										

*Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

**Pneumonia and influenza.

†Because of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

††Total includes unknown ages.

‡Data not available. Figures are estimates based on average of past available 4 weeks.

Influenza - Continued

Despite the high transmissibility of the new variant, countries such as Australia and New Zealand were virtually unaffected by the virus. Some of these countries had experienced severe epidemics of the previous A(H1N1) variant (related to A/Chile/1/83). This observation suggests that cross-protection from prior natural infection with the A/Chile-like viruses may have attenuated the spread of A/Taiwan-like viruses in some regions or countries. However, laboratory data suggest that inactivated A/Chile influenza vaccine showed poor cross-protection to A/Taiwan in one U.S. outbreak (7,8).

Preliminary analysis of death certificates suggests that the A/Taiwan-like viruses may have been responsible for mortality during the winter. However, this finding contradicts the limited number of outbreaks reported in the elderly, the population generally at greatest risk in influenza epidemics. Analysis of hospital discharge diagnosis records and mortality data from the National Center for Health Statistics may clarify the impact of type A(H1N1) influenza in all age groups.

References

1. CDC. Antigenic variation of recent influenza A(H1N1) viruses. MMWR 1986;35:510-2.
2. Gregg MB, Hinman AR, Craven RB. The Russian flu: its history and implications for this year's influenza season. JAMA 1978;240:2260-3.
3. Reichelderfer PS, Kappus KD, Kendal AP. Economical laboratory support system for influenza virus surveillance. J Clin Microbiol 1987;25:947-8.
4. Baron RC, Dicker RC, Bussell KE, Herndon TL. Assessing trends in mortality in 121 U.S. cities, 1970-79, from all causes and from pneumonia and influenza. Public Health Rep 1988; 103:120-8.
5. CDC. Influenza A(H1N1) associated with mild illness in a nursing home—Maine. MMWR 1987;36:57-9.
6. CDC. Update: influenza activity—Micronesia, United States. MMWR 1986;35:685-7.
7. CDC. Influenza activity in civilian and military populations and key points for the use of influenza vaccines. MMWR 1986;35:729-31.
8. CDC. Antibody response to A/Taiwan/86(H1N1) virus in young adults receiving supplemental monovalent A/Taiwan/86 influenza vaccine following trivalent influenza vaccine. MMWR 1986;35:818-9.
9. Immunization Practices Advisory Committee. Monovalent influenza A(H1N1) vaccine, 1986-1987. MMWR 1986;35:517-21.

*Perspectives in Disease Prevention and Health Promotion***Progress Toward the 1990 Objectives for Improved Nutrition**

In 1985, the Public Health Service (PHS) reviewed progress on the 1990 objectives for the nation (1,2). Although none of the 17 nutrition objectives had been achieved, six appeared to be possibly attainable by 1990; achievement of the others appeared either unlikely or uncertain because of a lack of baseline data and inadequate survey information.

The Food and Drug Administration (FDA) and collaborating federal agencies* recently reported to the Assistant Secretary for Health on progress toward achieving 15 nutrition objectives identified by PHS as having special priority (Table 1). The Association of State and Territorial Public Health Nutrition Directors (ASTPHND) reported at the same time on state activities related to the nutrition objectives. A summary of the reports of these agencies and ASTPHND follows.

*National Center for Health Statistics, Center for Health Promotion and Education, CDC; Health Resources and Services Administration; and National Institutes of Health.

1990 Objectives — Continued

Improved Health Status

Since the review in 1985, substantial progress has been made toward achieving nutrition goals, although some objectives are difficult to assess. For example, national trends in iron deficiency anemia in pregnant women and growth retardation in children cannot be assessed because of insufficient data. The 1986 CDC Pediatric Nutrition Surveillance System, which monitors the status of young children from high-risk, low-income families participating in certain publicly supported health programs, found that the prevalence of short stature in this group was 10.4% and that the rate of short stature varied substantially by ethnic groups (3). Surveillance and

TABLE 1. Federal priority nutrition objectives for 1990***Improved health status**

1. The proportion of pregnant women with iron deficiency anemia (as estimated by hemoglobin concentrations early in pregnancy) should be reduced to 3.5%.
2. Growth retardation of infants and children caused by inadequate diets should have been eliminated in the United States as a public health problem.

Reduced risk factors

3. The prevalence of significant overweight (>120% of "desired" weight) among the U.S. adult population should be decreased to 10% of men and 17% of women, without nutritional impairment.
4. Fifty percent of the overweight population should have adopted weight loss regimens, combining an appropriate balance of diet and physical activity.
5. The mean serum cholesterol level in the adult population aged 18 to 74 should be at or below 200 mg/dL.
6. The average daily sodium ingestion (as measured by excretion) for adults should be reduced at least to the 3- to 6-gram range.
7. The proportion of women who breastfeed their babies at hospital discharge should be increased to 75% and 35% at 6 months of age.

Increased public-professional awareness

8. The proportion of the population that is able to correctly associate the principal dietary factors known or strongly suspected to be related to disease should exceed 75% for each of the following diseases: heart disease, high blood pressure, dental caries, and cancer.
9. Seventy percent of adults should be able to identify the major foods that are low in fat content, low in sodium content, high in calories, high in sugars, good sources of fiber.
10. Ninety percent of adults should understand that to lose weight people must either consume foods that contain fewer calories or increase physical activity—or both.

Improved services protection

11. The labels of all packaged foods should contain useful calorie and nutrient information to enable consumers to select diets that promote and protect good health. Similar information should be displayed where nonpackaged foods are obtained or purchased.
12. By 1985, the proportion of employee and school cafeteria managers who are aware of, and actively promoting, USDA/DHHS dietary guidelines should be greater than 50%.
13. All states should include nutrition education as part of required comprehensive school health education at elementary and secondary levels.
14. Virtually all routine health contacts with health professionals should include some element of nutrition education and nutrition counseling.

Surveillance-evaluation system

15. Before 1990, a comprehensive national nutrition status monitoring system should have the capability to detect nutritional problems in special population groups as well as to obtain baseline data for decisions on national nutrition policies.

*Public Health Service. Promoting health/preventing disease: Public Health Service implementation plans for attaining the objectives for the nation. Public Health Rep 1983; Sep-Oct(suppl):132-55.

1990 Objectives — Continued

survey data from the 1970s and the early 1980s indicate that the prevalence of iron deficiency anemia among young children declined during this time span (4). Data from the third National Health and Nutrition Examination Survey (NHANES-III), to be conducted from 1988 to 1994 by the National Center for Health Statistics, CDC, will indicate whether that trend has continued.

Reduced Risk Factors

Progress toward reducing certain risk factors has varied greatly. The 1985 National Health Interview Survey (NHIS) reported that approximately 50% of overweight respondents indicated they were trying to lose weight, with almost half of this group both increasing physical activity and decreasing caloric intake (5). Data from NHANES-III will be useful to further assess trends in the prevalence of overweight during the 1980s. In 1985, the National Heart, Lung, and Blood Institute of the National Institutes of Health launched the National Cholesterol Education Program, a cooperative nationwide education effort to reduce the prevalence of high blood cholesterol. Detailed guidelines for detecting, evaluating, and treating high blood cholesterol in adults have been developed to aid physicians and other health professionals in diagnosing and managing high blood cholesterol.

Accurate estimates of the sodium intake by the U.S. population have been limited by the availability of reliable data on the amount of sodium consumed from processed foods and table salt. The 1982-1984 FDA Total Diet Studies indicate that, excluding salt added at the table, adult sodium intakes are within the Estimated Safe and Adequate Daily Dietary Intakes of the National Academy of Sciences (1100-3300 mg) (6), but that children consume more sodium than the standard recommends for their ages. Further information on sodium consumption will be provided by NHANES-III and the U.S. Department of Agriculture (USDA) Nationwide Food Consumption Survey, which are in progress.

Since 1982, progress in the objective of increasing the proportion of women who breastfeed their babies at time of hospital discharge has slowed (7) and has varied according to geographic regions, education, income levels, and other factors. In 1984, approximately 61% of infants were breastfed at 1 week of age and 28% at 6 months of age. The Health Resources Services Administration has undertaken a special initiative to encourage breastfeeding that includes elements of research, training, and demonstration of effective methods of promoting and supporting breastfeeding.

Improved Services Protection

Public awareness objectives primarily address diet and health relationships. In the 1986 FDA Diet and Health Survey, 83% and 76% of adults were aware that diet plays a role in hypertension and coronary artery disease, respectively, and 65% and 57% of surveyed adults associated sodium and fat with these respective diseases (FDA, unpublished data). In addition, more than half of those surveyed believed that diet may play a role in cancer risk and that changing intakes of certain dietary components may help prevent cancer (2). About 90% of adults were aware that avoiding between-meal sweets can help reduce tooth decay (2). In 1985, more than 70% of adults identified calorie reduction and increased physical activity as the two best ways to reduce body weight (5).

Nutrition labeling, initiated in 1973, is used on 55% of the packaged foods regulated by FDA. Fifty-nine percent have sodium labeling. The publication, *Nutrition and Your Health: Dietary Guidelines for Americans* (8) offers guidance about healthy

1990 Objectives — Continued

eating and has been widely promoted in both the public and private sectors. USDA has revised recipe files for school lunch programs to lower fat, salt, and sugar in school meals (2).

Because data are limited regarding nutrition education and counseling in patient contacts with health professionals, the 1985 NHIS included a question about nutrition education received during routine health consultations. Twenty-nine percent of women and 22% of men reported that eating proper foods was discussed sometimes or often in routine contacts (5).

Progress toward requiring nutrition education in school health curricula has lagged. In 1978, 10 states mandated nutrition as a core content area in school health education; by 1985, only two additional states required nutrition education.

Surveillance-Evaluation System

A comprehensive nutrition surveillance system targeted for 1985—the National Nutrition Monitoring System (NNMS)—is now in place. The U.S. Department of Health and Human Services and USDA have made several reports to Congress on the NNMS, including a recently updated Operational Plan (9). Survey information about special populations is improving; for example, NHANES-III will oversample blacks and Hispanics to improve data on these populations (2).

ASTPHND Model Objectives

The ASTPHND has developed Model State Nutrition Objectives that relate directly to the 1990 objectives. The model customizes objectives to fit a state's needs and priorities; for example, each state may set specific objectives to reduce blood cholesterol levels in at-risk persons. Recently, ASTPHND ranked a comprehensive national nutrition monitoring system as the highest national priority among the 1990 objectives, and nutrition education in school health education as the highest priority on a state basis.

Reported by: Office of Disease Prevention and Health Promotion, Office of the Assistant Secretary for Health, Public Health Service.

Editorial Note: The experiences of the 1990 objectives suggested additional guidelines for the development of nutrition objectives for the year 2000. For example, the PHS Midcourse Review (2) found that some nutrition objectives were not measurable. For other objectives, a lack of baseline or other data has limited the tracking of progress. Accordingly, future objectives should be both measurable and addressed through surveys or appropriate surveillance systems.

Feasibility is also important in establishing objectives. National objectives predicated solely on improved nutrition may not be feasible for diseases and conditions of complex etiology. One current objective calls for the elimination of growth retardation caused by diet. However, because nutrition is only one factor in growth retardation, it is unlikely that the portion attributable solely to nutritional factors can be separately identified. Technical feasibility is another consideration. One 1990 objective calls for reduction of sodium intake levels as measured by urinary excretion, but national data are not available—and are not likely to be—because sodium excretion measures require specimens of total urinary excretion for a 24-hour period.

Scientifically sound and effective intervention strategies are essential for setting nutrition goals. For example, one objective targets decreases in adult obesity by 1990. However, there are no effective intervention strategies for the attainment of this objective. For obesity and other conditions of complex etiology, nutrition-related behavioral and educational objectives may be necessary.

1990 Objectives — Continued

The development of 1990 objectives has provided useful insights into the advantages of establishing goals that address national nutrition problems and the challenges of measuring progress toward their achievement. The recently released *Surgeon General's Report on Nutrition and Health (10)* emphasizes the importance of diet in preventing widely prevalent chronic diseases. It also emphasizes the need for realistic dietary strategies to reduce health risks and for data to monitor improvements in the nutritional health of the nation. The development of objectives for the year 2000 presents an opportunity to address these important needs.

References

1. Public Health Service. Promoting health/preventing disease: objectives for the nation. Washington, DC: US Department of Health and Human Services, Public Health Service, 1980.
2. Public Health Service. The 1990 health objectives for the nation: a midcourse review. Washington, DC: US Department of Health and Human Services, Public Health Service, 1986.
3. CDC. Nutritional status of minority children—United States, 1986. *MMWR* 1987;36:366–9.
4. Yip R, Binkin NJ, Fleshood L, Trowbridge FL. Declining prevalence of anemia among low-income children in the United States. *JAMA* 1987;258:1619–23.
5. Stephenson MG, Levy AS, Sess NL, McGarvey WE. 1985 NHIS findings: nutrition knowledge and baseline data for the weight-loss objectives. *Public Health Rep* 1987;102:61–7.
6. National Research Council. Recommended dietary allowances. 9th ed. Washington, DC: National Academy of Sciences, 1980.
7. Martinez GA, Krieger FW. 1984 milk-feeding patterns in the United States. *Pediatrics* 1985;76:1004–8.
8. Department of Agriculture, Department of Health and Human Services. Nutrition and your health: dietary guidelines for Americans. 2nd ed. Washington, DC: US Department of Agriculture, US Department of Health and Human Services, 1985.
9. Department of Health and Human Services, Department of Agriculture. Operational plan for the National Nutrition Monitoring System. Washington, DC: US Department of Health and Human Services, US Department of Agriculture, 1987.
10. Department of Health and Human Services. The Surgeon General's report on nutrition and health. Washington, DC: DHHS publication no. (PHS)88–50210.

Errata: Vol. 36, No. S-6

In the supplement dated December 18, 1987, "Human Immunodeficiency Virus Infection in the United States: A Review of Current Knowledge," the following corrections should be noted:

- p. 23 In Table 1, the 0 prevalence rate reported for Pittsburgh, PA, was for HTLV-1, not HIV-1.
- p. 38 In Table 12, the seventh entry should read Pittsburgh, PA, not Philadelphia, PA. Pittsburgh, not Philadelphia, is participating in the Multicenter AIDS Cohort Study (MACS).

Vol. 37, No. 26

- p. 406 The third sentence of the third paragraph should read: "In 1980, 76.3% of pregnant women received first-trimester prenatal care, and in 1985, 76.2% received such care."

FIGURE I. Reported measles cases — United States, Weeks 27–30, 1988



The *Morbidity and Mortality Weekly Report* is prepared by the Centers for Disease Control, Atlanta, Georgia, and available on a paid subscription basis from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) 783-3238.

The data in this report are provisional, based on weekly reports to CDC by state health departments. The reporting week concludes at close of business on Friday; compiled data on a national basis are officially released to the public on the succeeding Friday. The editor welcomes accounts of interesting cases, outbreaks, environmental hazards, or other public health problems of current interest to health officials. Such reports and any other matters pertaining to editorial or other textual considerations should be addressed to: Editor, *Morbidity and Mortality Weekly Report*, Centers for Disease Control, Atlanta, Georgia 30333.

Director, Centers for Disease Control
James O. Mason, M.D., Dr.P.H.
Acting Director, Epidemiology Program Office
Michael B. Gregg, M.D.

Editor Pro Tem
Richard A. Goodman, M.D., M.P.H.
Managing Editor
Karen L. Foster, M.A.

☆U.S. Government Printing Office: 1988-530-111/81518 Region IV

DEPARTMENT OF
HEALTH & HUMAN SERVICES
Public Health Service
Centers for Disease Control
Atlanta, GA 30333

Official Business
Penalty for Private Use \$300

FIRST-CLASS MAIL
POSTAGE & FEES PAID
PHS/CDC
Permit No. G-284

A 481065
SERIALS ACQUISITION
UNIVERSITY MICROFILMS
300 NORTH ZEEB ROAD
ANN ARBOR, MI 48106

